



CT DEEP Solid Waste Facility Operator Certification - Module 3

"General Solid Waste Facility Operations, Waste/Materials Management & Common Problems/Troubleshooting"



General Solid Waste Facility Operations

- ▶ All SWF must have a DEEP Permit or Authorization
- ▶ All SWF must always have at least one DEEP Certified Operator On-Site during Operational Hours
- ▶ All SWF must comply with all CGS, RCSA, and Permit/Authorization Terms and Conditions



General Solid Waste Facility Operations

- ▶ All SWF users (residents, solid waste haulers, local/state governments, private contractors and businesses) must be Authorized by the Owner and/or Contractor operating the SWF
 - ▶ Permit/Authorizations are usually window decals on vehicles, truck registration numbers or some type of paperwork/license (Bill of Lading/Invoice)



General Solid Waste Facility Operations

- ▶ All SWF must maintain copies of the following documents on-site:
 - ▶ DEEP Permit/Authorizations
 - ▶ SWF Operation & Maintenance Plan (O&M)
 - ▶ SWF Site Plan - P.E.- Certified Engineering Plans
 - ▶ Emergency Plans & Safety Procedures *
 - ▶ Stormwater/Groundwater Management Plans
 - ▶ Compliance Audit Inspection Reports
 - ▶ Records of Incoming/Out-going Waste/Materials
 - ▶ DEEP SWF Operator Certificates



General Solid Waste Facility Operations

- ▶ Operator at SWF Entrance and/or Scale House:
 - ▶ Verifies Users Authorization/Permit
 - ▶ Asks Driver "What type of Waste/Materials do you have, and do you know where each type of waste/materials should be placed?"
 - ▶ Inspects Waste/Materials for anything unacceptable
 - ▶ Weighs vehicle (incoming/out-going)*
 - ▶ Consumer Protection Public Weigher License
 - ▶ Collects any Solid Waste Fee/Charge or provides Driver with an Invoice/Receipt
 - ▶ Allows Driver to enter SWF





General Solid Waste Facility Operations

- ▶ Operator(s) at SWF Tipping Floor and/or Area Drop-Off Locations:
 - ▶ Instructs Driver - wait, proceed, educates or informs (safety, procedures, laws etc.)
 - ▶ Inspects loads/waste/materials
 - ▶ Rejects or Isolates any unacceptable waste/materials
 - ▶ Operates Heavy Equipment, Compactors etc. to maneuver waste/materials *









General Solid Waste Facility Operations

- ▶ Occupational Safety & Health (OSHA)
 - ▶ Employers must provide a place of employment that is free from recognized hazards that are causing or are likely to cause death or serious injuries to employees
 - ▶ Employees must comply with all Safety & Health Standards, rules, regulations, and orders "that apply to their own actions and conduct on the job"



General Solid Waste Facility Operations

- ▶ Occupational Safety & Health
 - ▶ Employees Rights:
 - ▶ Inform Employer of any Safety & Health concern for immediate correction
 - ▶ Report any work-related injury or illness to OSHA or Request a confidential OSHA inspection without being retaliated against
 - ▶ File a Complaint with OSHA within 30 days if you have been retaliated against



General Solid Waste Facility Operations

- ▶ Occupational Safety & Health
 - ▶ Employers must provide Training to all Employees
 - ▶ Employers must prominently display OSHA Poster in the workplace
- ▶ OSHA Poster



General Solid Waste Facility Operations

- ▶ Occupational Safety & Health
 - ▶ Personal Protective Equipment (PPE)
 - ▶ General Protection
 - ▶ Eye and Face Protection
 - ▶ Respiratory Protection
 - ▶ Head Protection - Hearing *
 - ▶ Foot and Hand Protection
 - ▶ Electrical Protective Equipment
 - ▶ Personal Fall Protection Systems
 - ▶ Disease Protection *



General Solid Waste Facility Operations

- ▶ Occupational Safety & Health
 - ▶ Top Four Causes of Injury and/or Death
 - ▶ Slip, Trip, Lift *, and Falls
 - ▶ Struck-By
 - ▶ Caught In-Between
 - ▶ Electrocution
 - ▶ OSHA - Quick Card



General Solid Waste Facility Operations

- ▶ Occupational Safety & Health
 - ▶ SWF Traffic Control - controlled in such a way as to mitigate queuing of vehicles off-site, prevent unsafe traffic impacts to the area and provide a safe circulation pattern on-site to prevent accidents and injuries
 - ▶ Minimize the backing up of vehicles on-site which is the cause of most accidents



General Solid Waste Facility Operations

- ▶ Occupational Safety & Health
 - ▶ Heavy Equipment Operation
 - ▶ Operator must be trained in the operation and maintenance of the machine
 - ▶ Daily inspection before operating - leaks, damage, back-up warning alarms, radio, fire extinguisher, first aid kit, etc.
 - ▶ Anyone in the working area must have the proper PPE - Hardhat, safety glasses, fluorescent vest, boots etc.



General Solid Waste Facility Operations

- ▶ Occupational Safety & Health
 - ▶ Compactor Operation
 - ▶ Prevent Scavenging, illegal entry and accidental slip, trips and falls (fencing, gates, warning signs etc.)
 - ▶ Many historic accidents:
 - ▶ Injuries
 - ▶ Fatalities
 - ▶ Lawsuits



General Solid Waste Facility Operations

- ▶ Occupational Safety & Health

- ▶ Wood Clipper Operation

- ▶ Never work alone

- ▶ Always use PPE - hardhat, gloves, safety glasses, fluorescent vest, radio, hearing protection, etc.



General Solid Waste Facility Operations

- ▶ Occupational Safety & Health
 - ▶ Processing Equipment *
 - ▶ Conveyors, shredders, optical sorters, eddy current, magnetic separators, balers, compactors, tub grinders
 - ▶ Operators must be trained and must conduct regular maintenance always using Lock Out/Tag Out (LOTO)
 - ▶ Most common problem - plastic bags and tangles (garden hose, electric cords etc.)





WARNING
¡CUIDADO!
AVISO

203B

13A



General Solid Waste Facility Operations

- ▶ SWF Waste/Materials Management Procedures
- ▶ Daily Records, Monthly/Quarterly Tonnage Reports, Annual Recycling Reports for Municipalities
- ▶ Inspection Records & Compliance Audit Inspection Reports



General Solid Waste Facility Operations

- ▶ SWF Waste/Materials Management Procedures
- ▶ Emergencies: Injuries, Accidents, Fire, Explosions, Fatalities, Shut-Downs, Equipment Failure/Malfunction
- ▶ Fires - Sufficient water source and quantity of water is available; adequate equipment is provided; operators are trained; fire protection system is maintained in accordance with manufacturer's specifications or at least once a year





General Solid Waste Facility Operations

- ▶ SWF Waste/Materials Management Procedures
- ▶ Destinations of Waste/Materials
 - ▶ WTE/RRFs
 - ▶ Landfills (OOS)
 - ▶ Recycling (MRFs, scrap yards...)
 - ▶ Diversion (Compost/AD/Reuse/Repair...)*



QUIZ -TRUE or FALSE?

- 1) Certified Operators are responsible for educating residents and haulers.
- 2) Employees must contact OSHA first when any H&S issue is identified.
- ▶ 3) SWF Site Plans must be kept on-site.
- 4) Slip, Trips and Falls are relatively uncommon at SWFs.
- 5) Heavy Equipment Operators must inspect the machine daily before using.



ANSWERS

- 1) True - educating others is one of several Operators responsibilities
- 2) False - Notify your employer first for immediately correction
- ▶ 3) True - Site Plans are one of several documents to be kept on-site
- 4) False - Slip, Trips and Falls are very common
- 5) True - Daily inspections are required on heavy equipment



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Management of Waste/Materials - All solid waste/materials (authorized by your Permit or Approval) must be managed in compliance with all Permit/Approval requirements and conditions
 - ▶ All Waste/Materials must be handled, processed, consolidated, stored and transported in DOT approved containers
 - ▶ All Waste/Materials must be sent to authorized disposal/recycling facilities



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Access Control - use of gates, fences and/or other natural/artificial barriers to prevent unauthorized entry
 - ▶ Sufficient Staff on-site to monitor residents and haulers, inspect loads, educate and enforce rules
 - ▶ Satellite Drop-Off Sites operating with the MTS GP are exempt from the staffing and certified operator requirements



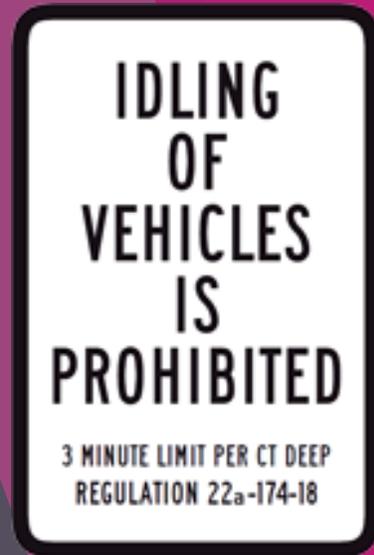
General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ All individuals under the supervision of a Certified Operator must have annual training by the Municipality or Company - safety and emergency procedures, proper facility operations, management of incoming waste and materials, including any inadvertently unacceptable/unauthorized waste received



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Trucks are not left idling for more than three consecutive minutes pursuant to RCOSA Section 22a-174-18(b)(3) and (c)
 - ▶ Exceptions: Stuck in traffic, outdoor temperature is below 20 degrees F, or while defrosting, heating or cooling to ensure the health and safety of the occupants
 - ▶ Signs must be posted at the entrance, scale and unloading areas



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Education - Must provide residents/haulers with information regarding waste management and recycling procedures - handout pamphlets, signs, website etc.
 - ▶ Sanitation - Must operate and maintain facility to prevent ponding of water, odor, dust, litter, and the harboring, feeding or breeding of vectors - Written Maintenance Plan and Weekly Inspections*



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Spills or leaks are cleaned up immediately
 - ▶ Clean-up materials and equipment are always readily available on-site
 - ▶ Uncontained Spills must be reported immediately to DEEP Emergency Response and Spill Prevention Division

at 1-866-DEP-SPIL (1-866-337-7745)

Or 860-424-3338



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Spill Reporting: the location; the quantity and type of substance, material or waste; the date and the cause of the incident; the name and address of the owner; and the name and address of the person making the report and his relationship to the owner
 - ▶ Note: Unless specifically requested, the DEEP does not require a written submission when reporting a spill



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Management of Waste/Materials - must be processed and transferred on a First In/First Out (FIFO) basis
 - ▶ Fully loaded containers must be transferred off site within two business days (48 hours)*



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Management of Unacceptable/Unauthorized Waste - Reject/reload or immediately sort, isolate and store in designated container
 - ▶ Maximum volume at MTS GP facilities is 40 cy
 - ▶ Maximum volume at Commercial facilities is 20 cy (maximum putrescible MSW is 10 cy)
 - ▶ Putrescible MSW must be removed from the Facility within 48 hours of its receipt



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Management of Unacceptable/Unauthorized Waste - Record type/amount in daily log and include this on the quarterly DEEP report



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Record Keeping - must have a system for measuring, recording and reporting all Facility activities - must be readily available to any DEEP inspector
 - ▶ Types/Quantities of all waste/materials (daily)
 - Destinations of all waste/materials, Inspection Logs, Emergency and Spill Reports, Operator Certificates, Site and Equipment Maintenance Records, Log of any scheduled or unscheduled shutdowns, Quarterly Tonnage Reports



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ MTS certified operator must conduct an annual Compliance Audit/Inspection
 - ▶ Commercial facilities must hire a consultant and conduct Quarterly Audits*
 - ▶ Compliance Audit Report must include names, dates, areas inspected, records reviewed, compliance, violations identified and how they are corrected
 - ▶ Report just kept on-site at MTS; Commercial facilities must submit Reports to DEEP



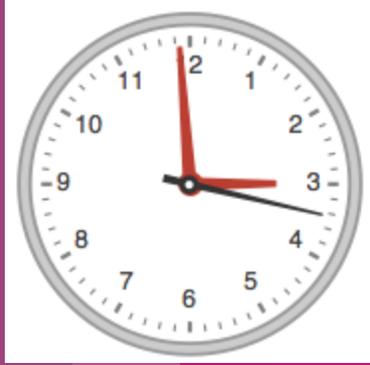
General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Reporting of Emergencies to DEEP
 - ▶ Fires, Explosions, Accidents, Injuries, Death
 - ▶ Any incident that significantly damages equipment or structures, interrupts the operation of the Facility for more than 24 hours, results in an unscheduled shutdown or forced diversion of waste to other Facilities or is expected to create pollution or threaten public health



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Initial Report of an Emergency: notify local authorities and DEEP's MMCA (860-4243366) within 24 hours
 - ▶ Submit Final Report to DEEP within 30 days detailing the cause and effect of the Emergency and the remedial steps taken to prevent a reoccurrence
 - ▶ Record Incident in Facility's Emergency Log



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Surface Water and Groundwater Management
 - ▶ All Facilities must be operated to prevent pollution to surface and ground water
 - ▶ All Facilities must meet all local, state and federal requirements for any existing or proposed stormwater and wastewater collection, treatment and discharge systems or if the Facility is in a costal, wetland or aquifer protection regulated area
 - ▶ Facilities must use impermeable covers over all waste, secondary containment, impervious surfaces and other measures to prevent pollution



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ On-Site roads and storage areas must be constructed of materials suitable for the expected traffic flow and maintained for all weather conditions; adequate drainage to prevent ponding



General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Scavenging is prohibited primarily for safety reasons
 - ▶ MTS are encouraged and are authorized to set up a Swap Shop or Material Exchange Area in a safe location
 - ▶ Operators should educate residents and haulers about alternatives - Free at the Curb, Thrift Shops, ReStores - Habitat for Humanity, Selling items, Repair/Refurbish etc.





General Solid Waste Facility Operations

- ▶ General Operating Conditions:
 - ▶ Sign at Facility's Entrance - The following information must be posted at the gate:
Name of Permittee, Permit/Registration Number, Hours of Operation, Who may use the Facility, a 24-hour contact phone number
 - ▶ Commercial Facilities must also post the Dates of the Permit Issuance and the Expiration



Town of Marlborough Transfer Station Hours of Operation

Tues: 3-7 Sat: 8-4

**USE IS FOR TOWN RESIDENTS WITH
TOWN STICKER. ALL OTHERS WILL BE PROSECUTED**

REG # 07901100-MTSGP

PHONE # 860-295-6218





Materials Innovation and Recycling Authority

CSWS Recycling Facility

Materials Innovation and Recycling Authority - Permittee

Permit-to-Operate No. 06401153-PCO

Date of Issuance: December 1, 2014

Date of Expiration: December 1, 2024

24 Hour Phone # 860-757-7700

Receiving Hours

Monday - Friday
7:00AM to 4:00PM
Saturday After
Holiday
Sunday
CLOSED

Authorized Material

Acceptable
Recyclable Materials

Authorized Users

Municipalities and Private
Waste Hauling Companies
which have a Contract with
MIRA to Deliver Acceptable
Recyclables.

Safety Precautions

- NO Scavenging
- NO Private Vehicles
- NO Unauthorized Personnel
- WATCH For Backing Trucks
- Reflective Vest, Hardhat and Safety Glasses Required on



QUIZ - TRUE or FALSE

- 1) Fully loaded containers must be transferred out within 48 hours.
- 2) MTS operators must conduct Compliance Audit Inspections every
▶quarter.
- 3) Unacceptable waste received at a SWF must be recorded and reported.
- 4) All outdoor waste containers must have impermeable covers.
- 5) DEEP requires a written report for any type of spill within 30 days.



ANSWERS

- 1) True - Full containers cannot remain on-site for more than 48 hours
- 2) False - MTS operators must conduct annual Compliance Audit Inspections
- 3) True - Recorded on daily log and included on DEEP quarterly report
- 4) True - Impermeable covers are required on all outdoor containers
- 5) False - Written reports are only required if requested by DEEP



General Waste/Materials Management:

Scrap Metals

OMSW

C&D

Clean Wood

Treated Wood

Clean Fill &

Scrap Tires



General Waste/Materials Management - Scrap Metals

"Scrap metal" is designated either Ferrous or Non-Ferrous

- Ferrous metals contain iron and are known for their strength. A few examples of ferrous metals include steel, stainless steel, carbon steel, engineering steel, wrought iron and cast iron
- Non-ferrous metals do not contain iron. They are non-magnetic and lightweight. Some examples include aluminum, aluminum alloys, copper, brass, gold, nickel, silver, tin, lead, and zinc



General Waste/Materials Management - Scrap Metals

Scrap Metal Management

- Appliances:
 - Containing Chlorofluorocarbons (CFCs) and/or related compounds "Freon ®"
 - Containing Polychlorinated Biphenyls (PCBs)
- Propane Tanks (Gas Cylinders)



Chlorofluorocarbons (CFCs) & other Related Compounds (HCFCs)

EPA Penalties

- A willful release of refrigerants or failure to follow EPA recovery guidelines carries stiff penalties for the technician
 - \$30,000 per occurrence
 - Up to 5 years jail time
- EPA offers a \$10,000 reward to anyone reporting a violation



General Waste/Materials Management - Appliances

Containing Chlorofluorocarbons and/or related compounds
- commonly all called "Freon ®"

- Refrigerators, Freezers, Air Conditioners, Dehumidifiers and Water Coolers
- Acceptance: Fee usually Required
- Handling: Carefully unload, not to damage coils
- Storage: Impervious surface, upright, door removal is recommended, Maximum volume as designated in DEEP Permit (Range: 25-100 units) *





BRIDGEPORT
RECYCLING

BRIDGEPORT RECYCLES

BRIDGEPORT
RECYCLING

REC

13

SPEED
LIMIT



General Waste/Materials Management - Appliances

- Never intentionally evacuate CFCs into the environment
- CFCs were chosen in the 1920s and 30s to replace other chemical refrigerants toxic to humans like ammonia and methyl chloride
- In 1974, CFCs were determined the cause of significant stratospheric ozone depletion
- Production of CFCs completely ceased in 1995 and all new products use **Hydrochlorofluorocarbons (HCFCs)** - which produces less stratospheric ozone depletion



General Waste/Materials Management - Appliances

- Only operators certified in accordance with Section 608 of the Clean Air Act (Federal EPA Regulation) may remove the CFCs or related compounds with the appliances
- Appliances must be clearly marked after evacuation with either spray paint or a label/decal
- Evacuated Appliances - placed with other scrap metal (in containers and/or piles) *





General Waste/Materials Management - Scrap Metal

- Maximum Storage of all Scrap Metal is limited
 - CGP - Appendix E (Non-RCRA) limit is: 60 cy; CGP - Appendices D (C&D) and F (recyclables) is max 200 cy in containers - including up to 40 cy that can be stored outdoors in piles
 - The MTS Storage limit is 800 cy! *
 - All outdoor containers of Scrap Metal must have an impervious cover or roof; outdoor piles however are exempt



Polychlorinated Biphenyls

CAUTION
CONTAINS
PCBs
(Polychlorinated Biphenyls)

A toxic environmental contaminant requiring special handling and disposal in accordance with U S Environmental Protection Agency Regulations 40 CFR 761 For Disposal Information contact the nearest US E.P.A. Office.

In case of accident or spill, call toll free the US Coast Guard National Response Center:
800-424-8802

Also Contact _____
Tel. No. _____



Polychlorinated Biphenyls

- Appliances containing PCBs were domestically manufactured from 1929 until manufacturing was banned in 1979
- Appliances such as air conditioners may contain several PCB capacitors
- Lighting fixtures may contain PCB ballasts
- DEEP-Certified SWF Operators may remove PCB capacitors and ballasts for proper disposal under the Toxic Substances Control Act (TSCA) - A Federal EPA Regulation





Polychlorinated Biphenyls

- For appliances containing PCBs - Each SWF must have only two 55-gallons drums or other chemically compatible containers on-site
 - One designated for leaking items and one for intact items - properly labelled/dated
 - Drums must contain absorbent material at the bottom and be stored in secured area as designated on your SWF Site Plan
 - Drums containing PCBs cannot be stored for greater than one year on-site



General Waste/Materials Management - Propane Tanks

- Gas Cylinders can be one of the most dangerous items received at SWFs and must be managed correctly to prevent explosions/fire and injuries/death
- Many are small one-pound cylinders used by hikers/campers
- Most are the twenty-pound tanks used for gas grills, outdoor heaters and RVs



General Waste/Materials Management - Propane Tanks

- Each SWF must have a Written Plan for managing and storing propane tanks on-site - this Plan must be reviewed and approved annually by the local Fire Marshall
- Tanks must be stored upright in a designated well-ventilated storage area, separated from public access and surrounded by a fence and gate



General Waste/Materials Management - Propane Tanks

- Required Signage - "No Smoking/Flammable Gas/ No Open Flames Permitted" - 2-inch-high lettering or a "No Smoking/No Flames graphic"
- Posted in English and other languages typically spoken by residents/haulers



DANGER
PROPANE



03.22.2017





General Waste/Materials Management - Propane Tanks

- Propane Extraction: Only a person trained according to the requirements of the National Fire Protection Association with appropriate equipment shall extract any remaining propane and de-valve the tanks
- Once de-valved, tanks may then be consolidated in the scrap metal container



General Waste/Materials Management - Propane Tanks

- MTS may store up to 100 units
- Commercial Facilities are limited to 10 units



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General Waste/Materials Management - Oversized MSW (OMSW)

- OMSW are Rugs/Carpet, Furniture, Large Plastic Items, Mattresses/Box Springs etc.
- These items are usually commingled with the Construction & Demolition Debris, with the exemption of "clean dry mattresses/box springs" - which now should be segregated for recycled/refurbished - EPR





General Waste/Materials Management - Oversized MSW (OMSW)

- OMSW may be placed temporarily on the ground for compaction but must be consolidated in storage containers by the end of each operational day only at MTS
- No grinding or shredding is allowed at MTS facilities; Commercial facilities may grind, shred and compact but only indoors on the tipping floor



General Waste/Materials Management - Oversized MSW (OMSW)

- All Mattresses/Box Springs received must be inspected: Dry, relatively clean and look for evidence of Bed Bugs
 - Segregate and store for recycling/EPR in accordance with the Bed Bug Management Plan - kept on-site
- Unacceptable mattresses/box springs must be disposed along with the OMSW/C&D





11.06.2012 11:55





GIVE BED BUGS THE BOOT!

The Connecticut Coalition Against Bed Bugs (CCABB) was established in 2009 to educate, train, and support citizens in the state of Connecticut regarding bed bug biology, behavior, and prevention. The CCABB works both directly with the public and also with pest management professionals, local health departments, and state agencies etc.

Our goal is to reduce social stigma by providing accurate, up to date information about bed bugs, their life cycle, behavior, the latest research on control and prevention, and to support and conduct further scientific research on bed bugs.

This pamphlet is written for waste & recycling transfer station personnel to provide knowledge and empowerment to recognize, prevent, and deal with this insect.

Published in collaboration
with the Mattress Recycling
Council (860) 904-0981 and
DEEP (860) 424-3366



Information: www.ct.gov/bedbugs



Expert Resources:

Find Your Local Health Department

https://www.han.ct.gov/local_health/localmap.asp

CT Department of Public Health

860-509-7660

Webmaster.dph@ct.gov

Bed Bug Identification

The CT Agricultural Experiment Station

203-974-8600

www.ct.gov/bedbugs

gale.ridge@ct.gov

Pesticide Enforcement & Certification

diane.jorsey@ct.gov

Legal Aid

State of CT Division of Criminal Justice Housing Session

New Haven: 203-773-6755

Bridgeport: 203-579-7237

Hartford: 860-756-7810

New London: 860-443-8444

judith.dicline@ct.gov (write "bed bug" in subject box)

This brochure was developed by CCABB under the leadership of the Connecticut Agricultural Experiment Station.

The Connecticut Agricultural Experiment Station (CAES) prohibits discrimination in all of its programs and activities on the basis of race, color, ancestry, national origin, sex, religion, creed, age, political beliefs, sexual orientation, criminal conviction record, genetic information, learning disability, present or past history of mental disorder, mental retardation or physical disability (including but not limited to blind, deaf, or mental or family status).



**Worried About
Bed Bugs at
Transfer Stations?**



**DON'T
PANIC:**

**Give them the boot!
(we'll show you how)**



size of an apple seed, 1/4 inch.

- Young bed bugs (nymphs) are about the size of a sesame seed when they hatch
- Bed bug eggs are tiny, white, and barrel-shaped
- All life stages of bed bugs are **visible to the naked eye**
- Bed bugs hide in cracks, crevices and are very shy
- They feed on our blood but unlike lice, **hate to be on us**
- When frightened, they cling to objects and this is how they are accidentally moved
- When bed bugs know they have been discovered, they'll try and squeeze and flatten into a tuft or crack or run in many jagged directions before sprinting for cover. They will not deliberately chase after a person in this situation
- Bed bugs are very timid so will only feed on people when it is very quiet

Prevention

As little as 5% of mattresses collected for reuse or recycling in Oregon and California have been found to have bed bugs. Know what to look for.



Adult Female

You are in control, not the bug!

Tools and actions:

Flashlight: A halogen or bright flashlight is useful to illuminate inspections of suspicious mattresses

Magnifying Glass: Useful to enlarge inspection area(s)

Spray bottle: If needed, use soapy water, to disable and/or kill insects

Bagging materials: If bed bugs are found, follow predetermined protocols including bagging of mattress(es), removal from recycling stream, and disposal

Clothing: If worried about bed bug hitchhikers, change clothes, insert in trash bag, and seal. Empty clothes into dryer for 20 minutes on high heat. No more bed bugs!

Home: Professionals who work with bed bugs rarely

You are in control, not the bug!

- Bed bugs are medically harmless in comparison to mosquitoes and ticks who vector human disease causing pathogens. **Bed bugs do not pass on any disease agents**
- Bed bugs cause anxiety and fear. Their shyness and nervous erratic behaviors around us, make us nervous. We also don't like them feeding on us
- If we accidentally bring them home, Social stigma such as association with uncleanness and high cost for treatment, can increase anxiety. **Bed bugs do not care about your income-level;** they can be a nuisance in any home. But they are easy to manage, **if detected early.**
- If someone reports bed bugs, rather than being thanked, they are often attacked. This slows prompt reporting and allows bed bug infestations to get out of control. Be thankful someone speaks up, now you can protect yourself and others around you!
- **Beware of urban myths, "fear talk," and misinformation.**



Don't let the stigma of bed bugs become your burden!



General Waste/Materials Management - Oversized MSW (OMSW)

- Some Commercial GP facilities may dismantle mattresses/box springs into various components (textiles, foam, wood and metal) for recycling
- Must be processed on a FIFO basis and components stored in appropriate containers
- Storage Limits: Total OMSW at MTS - 200 cy; Mattresses/Box Spring totals at CGP - 1,900 units and 1,000 cy of processed components





 **Mattress Recycling Council**
every mattress matters

**MATTRESS & BOX SPRING
RECYCLING ONLY**

Please Stack Mattresses Neatly

SORRY, WE DON'T ACCEPT:

- Excessively Wet, Damaged or Soiled Mattresses
- Bed Bugs
- Car Beds
- Fold-Out Sofa Beds & Futons
- Furniture & Other Household Items
- Infant & Child Products
- Excessively Wet, Damaged or Soiled Mattresses
- Mattress Pads, Toppers, Pillows or Bedding
- Garbage
- Water Beds, Air Mattresses or Sleeping Bags

Mattress Recycling Council
7405 27th Street
www.mattressrecycling.org

**MATTRESSES
& BOXSPRINGS**

**PLACE FLAT
ON FLOOR
STACK TO CEILING**



General Waste/Materials Management - Construction & Demolition Debris (C&D)

- Clean Wood - reuse/recycle
- Treated Wood - disposal
- Scrap Metals - recycle *
- OMSW - dispose *
- Clean Fill - reuse/recycle
- Plastics/Vinyl/Packaging - dispose/recycle
- Paper - Cardboard, Mixed Paper - recycle
- Asphalt Roofing Shingles - recycle
- Gypsum Wall Board - dispose/recycle





General Waste/Materials Management - Construction & Demolition Debris (C&D)

- C&D debris may only be unloaded onto an indoor tipping floor for sorting and compaction on a FIFO basis - otherwise, it must be placed directly into a container and only compacted - outdoor containers must have impermeable covers



General Waste/Materials Management - Construction & Demolition Debris (C&D)

- MTS C&D Storage Limit - 800 cy !
- CGP C&D Storage Limits - 150 cy of unprocessed and 300 cy of processed
- 90% of Connecticut's C&D/OMSW is exported Out-of-State to Sanitary Landfills - not sustainable nor responsible management !



General Waste/Materials Management - Clean Wood

- Clean Wood includes land-clearing debris (Brush, logs, stumps etc.), any "untreated construction wood" or "untreated wood products" - wood from box springs, packaging - boxes, pallets, spools etc.
 - No painted, stained, pressure treated, plywood, composite board etc.





General Waste/Materials Management - Clean Wood

- Clean Wood is stored outdoors in piles; piles do not need to be covered
- Historically, SWFs would burn the clean wood up to 6 times/year
- DEEP Air Permits would be required and are not being issued much in the last couple of decades - DEEP requires towns to chip/grind and reuse/recycle its clean wood





General Waste/Materials Management - Clean Wood

- All land-clearing debris must be inspected for critters - The Emerald Ash Borer & The Asian Longhorn Beetle - CT Agricultural Experiment Station (CAES)
- MTS Clean Wood Storage Limits - 3,000 cy unprocessed (max. 25 ft height piles) and 2,500 cy processed (max. 15 ft height piles) with 25-foot-wide access lanes in case of fires; area sloped 3-5% to prevent ponding







General Waste/Materials Management - Clean Wood

- CGP - App. C* Clean Wood Storage Limits:
 - Tier I - 100 cy unprocessed/300 cy processed
 - Tier II - 250 cy unprocessed/750 cy processed
 - Tier III - 3,000 cy unprocessed/2,500 cy processed
- CGP - App. D* - Clean Wood Storage Limit:
 - 1,000 cy unprocessed - no processing allowed



General Waste/Materials Management - Treated Wood

- Treated wood (aka dirty wood) must be disposed - usually commingled in the C&D/OMSW container - impermeable cover
- If segregated, MTS Storage Limit - 200 cy; CGP Storage Limit - 100 cy





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NH RX

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C



General Waste/Materials Management - Clean Fill

- Clean Fill - is defined as soil, rock, brick, concrete and asphalt paving fragments
- Completely reusable/recyclable if truly "clean" - asphalt is not clean; concrete & brick could have paint, chemicals etc.; soil can be polluted/contaminated
- In 2008, DEEP attempted to amend Clean Fill Regulations - Regulated or Recyclable Fill





11.06.2012 11:57



General Waste/Materials Management - Scrap Tires

- Whole Scrap Tires only - no tire shreds, tire chips or crumb rubber (rubber mulch) and no processing allowed
- No mounted tires/Rims
- Placed in containers or on pallets by the end of the operational day; outdoor containers/storages areas must have impermeable covers



R
FEE UNLOAD
FOR TIRES IN
ROLL OFF
CONTAINER



Container for Tires at Transfer Station





General Waste/Materials Management - Scrap Tires

- MTS Scrap Tires Storage Limit - 100 cy
- CGP Scrap Tire Storage Limit - 20 cy
- [DEEP Scrap Tire Website](#)

- Connecticut has 3 VRFs that accept and process scrap tires: Lakin - West Haven, Don Stevens - Southington and Empire - Plainfield
 - Tire Derived Fuel (Shreds), Tire Chips, Crumb Rubber, Rubber Mulch etc.



General Waste/Materials Management - Scrap Tires

- Beneficial Use General Permit for Processing Scrap Tires
- Exeter Energy/ReEnergy RRF (Tire-to-Energy)
 - Closed in 2013 - combusted 10 million scrap tires/year !
- The Infamous Tire Pond





APPROXIMATE EDGE OF POND FROM
AERIAL PHOTOGRAPHY DATED 9/14/05
BY GOLDEN AERIAL SURVEYS

APPROXIMATE EDGE OF POND FROM
AERIAL PHOTOGRAPHY DATED 4/21/03
BY GOLDEN AERIAL SURVEYS

APPROXIMATE EDGE OF POND FROM
AERIAL PHOTOGRAPHY DATED 7/12/03
BY GOLDEN AERIAL SURVEYS

TIRE POND

N/F
JOSEPH FARRICIELLI.

N/F
TIRE SALVAGE INC.

BM
REBAR
ELEV.

BM # 807/43
REBAR W/ F&O
ELEV.=14.73

BM # 807/43-4
REBAR W/ F&O
ELEV.=14.74



Common SWF Problems & Troubleshooting



Common Problems & Troubleshooting

- ▶ Public Relations - SWF Operators must communicate with all kinds of people - some may be upset or even hostile
 - ▶ Reasons include but are not limited to the following:
 - ▶ Opposition to the Facility in their neighborhood
 - ▶ Health, Safety and Environmental Concerns
 - ▶ The increasing costs of disposal
 - ▶ Some people are just always angry



Common Problems & Troubleshooting

- ▶ Required Documents are not kept on-site
- ▶ Insufficient number of staff on-site
- ▶ Required Inspections are not be performed
- ▶ Impermeable Covers are not used
- ▶ Unacceptable waste is being brought in
- ▶ Residents/Haulers are not recycling
- ▶ Violations are not being identified/resolved
- ▶ Signage issues - lack of required information,
Required signs are not posted, improper labels



Common Problems & Troubleshooting

- ▶ Public Health, Safety and Environmental Issues
 - ▶ Poor Traffic Flow, Lack of Barriers/Railings, people are allowed in dangerous work zones without PPE - no enforcement of the rules, Operators who do not use their PPE, etc.
 - ▶ Leachate (contaminated water)
 - ▶ Odors & Dust
 - ▶ Litter
 - ▶ Noise
 - ▶ Vectors



QUIZ - TRUE or FALSE

- 1) Incoming loads of land-clearing debris must be inspected.
- 2) De-valved propane tanks can be commingled with scrap metal items.
- 3) VRF operators cannot sort reusable and recyclable items out of mixed C&D debris.
- 4) All Mattresses & Box Springs are recyclable.
- 5) When inspected, several violations can be identified at most SWFs.



Answers

- 1) True - Must inspect for EAB and ALB
- 2) True - tanks are no longer pressurized and considered dangerous/explosive
- 3) False - VRF Operators can manually and mechanically sort out recyclable items from mixed C&D only
- 4) False - only dry, relatively clean mattresses and box springs are recyclable
- 5) True - DEEP does not have enough inspectors so there are generally many non-compliance issues/violations





**You have
Completed Module
3 !**

**"General Solid
Waste Facility
Operations, Waste
Management &
Common
Problems/Trouble-
shooting"**

